AMENDMENTS TO THE SPECIFICATION

Please replace application paragraph [0001], found on page 2, with the following replacement paragraph:

The present application is a continuation of U.S. Patent Application Serial No. 09/542,559, filed April 4, 2000 (now U.S. Patent No. 6,832,377), which in turn claims the benefit under 35 U.S.C. §119(e) of United States Provisional Patent Application Serial No. 60/127,767 filed Apr. 5, 1999, and under 35 U.S.C. §120 of United States Patent Application Serial No. 09/312,123, filed May 14, 1999 (now U.S. Patent No. 6,757,903). All of the foregoing identified patent applications are herein incorporated by reference in their entirety.

Please replace application paragraph [0002], found on page 2, with the following replacement paragraph:

The present application hereby incorporates the following United States Patents ~~Applications~~ by reference in their entirety:

~~*Attorney Docket Number*~~	*Filing Date*	*Serial Number*	*Patent Number*
~~P1637US00~~	April 4, 2000	09/542,716	7,010,792
~~P1640US00~~	April 4, 2000	09/542,743	7,395,539
~~P1641US00~~	April 4, 2000	09/542,159	6,880,157
~~P1642US00~~	April 4, 2000	09/542,714	6,842,894

Please replace application paragraph [0022], found on page 9, with the following replacement paragraph:

The architecture of the present invention also enables efficient development of applications, whether work processors (e.g., word processors), video applications, games or soft appliances. The architecture of the present invention includes dynamic base-objects (DBOs). Each DBO implements a defined behavior, but can~~may~~ in addition request and use capabilities of another DBO. DBOs can~~may~~ also provide services to another object such as a DBO requesting another DBO.

Please replace application paragraph [0023], found on page 9, with the following replacement paragraph:

In a presently preferred embodiment of the invention, a DBO can~~may~~ provide service routines to manage identification and communication with other DBOs. The architecture of the present invention also provides a DBO hierarchy, wherein each DBO or class within the hierarchy specializes in providing one particular type of service. A presently preferred exemplary embodiment of this hierarchy is illustrated in FIG. 3. The hierarchy of the present invention allows for features and capabilities not found in prior art object oriented programming.

Please replace application paragraph [0027], found on pages 10-11, with the following replacement paragraph:

Universal registration can~~may~~ be utilized to uniquely name DBOs so as to permit a DBO or set of DBOs to have a unique name to permit a user to create, maintain, and utilize

personal DBOs. A string naming convention can~~may~~ incorporate the "company or organization name" of the creator, the name of the object and the name of the method or property. The formula in this example is "<company>.<objectname>.<method/property>." Under the string naming convention, each user can~~may~~ have a different term under the "company" portion of the string naming formula. By utilizing universal registration, the unique user name can~~may~~ be verified and stored so that each user may be guaranteed a unique ID, thereby permitting the benefit of user unique DBOs. In a presently preferred embodiment of the present invention, a nomenclature or naming convention is utilized so as to facilitate operation and maintain class hierarchy.

Please replace application paragraph [0030], found on page 12, with the following replacement paragraph:

Furthermore, registration information can~~may~~ be contained in a registration DBO so that it may be easily downloaded and accessed by a variety of systems so as not to require the user to enter registration information on resources where the user is not pre-registered. For example, a registration-DBO can~~may be able to~~ identify the particular fields that need to be filled and supply that information from registration information contained in the registration-DBO. By having a registration DBO handle the particulars of the registration, the user may seamlessly utilize a variety of registration resources without having to individually register at each particular resource. For example, as shown in FIG. 7A, a user utilizing a digital information appliance 702 can~~may~~ send an access query 704 with an embedded registration interface-DBO 706 to access a resource 710 over a network 708. Thus, if the resource 710 requires registration, the registration interface-

DBO 706 can~~may~~ supply the needed information from a registration implementation-DBO 712 located at a universal register 714. In this way, a user may gain access to registration required resources without the need of entering and reentering registration information every time the user wished to access the resource. Further, the registration information can~~may~~ be located at a location different than the registration interface-DBO, thereby enabling resource savings on the digital information appliance.

Please replace application paragraph [0031], found on pages 12-13, with the following replacement paragraph:

An additional exemplary embodiment of an application of universal registration and the advantages of a registration DBO is shown in FIG. 7B. In this example, a user attempts to access a resource that requires registration 752. If the resource supports universal registration 754, and the user is universally registered 756, the resource can~~may~~ acquire registration information for the registration-DBO contained in a universal register. In this way, the user may gain seamless access to the resource without the need of entering registration and other information. This information can~~may~~ be contained in a registration DBO that the resource can~~may~~ access once the user attempts to utilize the resource. However, if the resource does not support universal registration 754, the user can~~may~~ still utilize a registration-DBO 762 to automatically insert registration information from that information contained in the pre-registered user data 770. In this instance, the registration-DBO enters the information for the user, thereby increasing the efficiency of utilizing the resource. If the user is not universally registered 756 and does not utilize a registration-DBO 762, the user must enter the required registration

information and billing information manually to gain access to the resource 766. This information can~~may~~ include name, address, credit card, expiration date of the credit card, phone number, email address, and the like. By enabling the user to universally register, the user may access a variety of resources without the time consuming process of re-entering the registration information.

Please replace application paragraph [0032], found on pages 13, with the following replacement paragraph:

One of the advantages of utilizing universal registration with a DBO is that the interface-DBO can~~may~~ be utilized to insert information from an implementation-DBO existing elsewhere on a network. For example, as shown in FIG. 8, a user accessing a resource on a network 802 may have to register with the resource to gain access 804. Therefore, an instance of an interface-DBO can~~may~~ be automatically passed to the resource from the appliance 806. The resource can~~may~~ then access the interface-DBO 808 to gain information on where to find the implementation-DBO carrying the actual registration information 810. Then, the resource can~~may~~ obtain the necessary registration information 812. In this way, resources can~~may~~ be conserved on a thin digital information appliance such that the digital information appliance need only store the interface-DBO while the registration implementation DBO stores the actual registration information elsewhere (FIG. 9). Further, since implementation-DBOs can~~may~~ be stored at a single location, the veracity of the registration information may be protected.